

CLAIMS

- 1 1. A method of translating a data stream into a context-insensitive tagged XML
2 message, including:
- 3 receiving a data stream of structured messages, including context-setting
4 messages and context-sensitive messages, said context-sensitive messages being
5 meaningful only when matched with corresponding context-setting messages,
6 said messages having one or more fields adapted to match the context-setting
7 messages with the corresponding context-sensitive messages;
- 8 tagging the structured messages with XML tags corresponding to the structure of
9 the messages;
- 10 matching the XML tagged context-setting messages with the corresponding XML
11 tagged context-sensitive messages, utilizing the fields; and
- 12 generating context-insensitive XML retagged messages, the context-insensitive
13 XML retagged messages having XML tags corresponding to the context of the
14 context-sensitive messages; and
- 15 outputting the context-insensitive XML retagged messages.
- 1 2. The method of claim 1, wherein:
- 2 the context-setting messages include variable identifiers for variables to be
3 reported;
- 4 the context-sensitive messages report values for the variables, said report
5 messages including variable values but not the variable identifiers;
- 6 generating XML retagged messages includes generating XML tags corresponding
7 to the variable identifiers and values corresponding to the variable identifiers.
- 1 3. The method of claim 2, further including accessing a dictionary that includes
2 variable names corresponding to the variables identifiers, and generating XML tags
3 corresponding to the variable names.

1 4. The method of claim 1, wherein:

2 the context-setting messages include report definition messages and report trigger
3 messages, said report definition messages including a report identifier and one or
4 more variable identifiers and said report trigger messages including an event
5 identifier and one or more report identifiers;

6 the context-sensitive messages include report messages generated upon
7 occurrence of an event associated with the event identifier, said report messages
8 including the report identifier and variable values but not the variable identifiers;
9 and

10 generating XML retagged messages includes generating XML tags corresponding
11 to the variable identifiers and reporting the variable values.

1 5. The method of claim 4, further including accessing a dictionary that includes
2 variable names corresponding to the variables identifiers, and generating XML tags
3 corresponding to the variable names.

1 6. The method of claim 1, wherein:

2 the context-setting messages include report definition messages, said report
3 definition messages including a report identifier and one or more variable
4 identifiers;

5 the context-sensitive messages include one or more report messages generated in
6 response to a report demand message, said report messages including the report
7 identifier and variable values but not the variable identifiers; and

8 generating XML retagged messages corresponding to the variable identifiers and
9 the variable values.

1 7. The method of claim 6, further including accessing a dictionary that includes
2 variable names corresponding to the variables identifiers, and generating XML tags
3 corresponding to the variable names.

1 8. The method of claim 1, wherein the structured messages are compliant with a
2 SECS standard.

1 9. The method of claim 8, wherein:
2 the context-setting messages include variable identifiers for variables to be
3 reported;
4 the context-sensitive messages report values for the variables, said report
5 messages including variable values but not the variable identifiers;
6 generating XML retagged messages includes generating XML tags corresponding
7 to the variable identifiers and the variable values.

1 10. The method of claim 9, further including accessing a dictionary that includes
2 variable names corresponding to the variables identifiers, and generating XML tags
3 corresponding to the variable names.

1 11. The method of claim 8, wherein:
2 the context-setting messages include report definition messages and report trigger
3 messages, said report definition messages including a report identifier and one or
4 more variable identifiers and said report trigger messages including an event
5 identifier and one or more report identifiers;
6 the context-sensitive messages include report messages generated upon
7 occurrence of an event associated with the event identifier, said report messages
8 including the report identifier and variable values but not the variable identifiers;
9 and
10 generating XML retagged messages includes generating XML tags corresponding
11 to the variable identifiers and reporting the variable values.

1 12. The method of claim 11, further including accessing a dictionary that includes
2 variable names corresponding to the variables identifiers, and generating XML tags
3 corresponding to the variable names.

1 13. The method of claim 8, wherein:

2 the context-setting messages include report definition messages, said report
3 definition messages including a report identifier and identifiers of variables to be
4 reported;

5 the context-sensitive messages include one or more report messages generated in
6 response to a report demand message, said report messages including the report
7 identifier and variable values but not the variable identifiers; and

8 generating XML retagged messages corresponding to the identifiers of the
9 variables and values corresponding to the values for the variables reported.

1 14. The method of claim 13, further including accessing a dictionary that includes
2 variable names corresponding to the variables identifiers, and generating XML tags
3 corresponding to the variable names.

1 15. An improved method of generating XML tagged messages from multiple
2 types of structured, non-XML messages, received by a computer system operating
3 one or more translation programs and subjecting the messages received to format
4 checking and data validity checking, the improved method including:

5 tagging the structured, non-XML messages with XML tags corresponding to the
6 structure of the messages;

7 interpreting content and the structure of the structure tagged message to identify
8 fields of the structure tagged messages;

9 generating field tagged messages from the structure tagged messages, said field
10 tagged messages having XML tags corresponding to the identified fields of the
11 structure tagged messages; and

12 checking the field tagged messages for data format and data validity checking
13 utilizing tools adapted to XML formatted messages.

1 16. The method of claim 15, further including accessing a dictionary that includes
2 variable names corresponding to the variables identifiers, and generating XML tags
3 corresponding to the variable names.

1 17. A improved method of generating XML tagged messages from multiple types
2 of structured, non-XML messages, received by a computer system operating one or
3 more translation programs and subjecting the messages received to business logic
4 processing, the improved method including:

5 tagging the structured, non-XML messages with XML tags corresponding to the
6 structure of the messages;

7 interpreting content and the structure of the structure tagged message to identify
8 fields of the structure tagged messages;

9 generating field tagged messages from the structure tagged messages, said field
10 tagged messages having XML tags corresponding to the identified fields of the
11 structure tagged messages; and

12 applying business logic processing to the field tagged messages utilizing tools
13 adapted to processing XML formatted messages.

1 18. The method of claim 17, wherein tagging of structured, non-XML messages
2 to form field tagged messages precedes applying business logic processing to data in
3 the structured, non-XML message.